- 1. (canceled)
- 2. (currently amended) A method of transmitting data packets comprising:

 identifying a priority of each packet of a plurality of packets to be

 transmitted;

selectively transmitting higher priority packets before transmitting lower priority packets of the plurality of packets;

receiving the transmitted packets;
smoothing the received data packets; and
playing-out the smoothed packets,

wherein, the step of selectively transmitting is performed by

calculating a probability of higher priority packets being delivered prior to play-out

times for the higher priority packets and transmitting a packet only if this probability

is greater than a set threshold

the method comprising the additional step of:

The method of transmitting data packets of claim 1, further comprising:

determining whether sufficient time remains before a scheduled play-out time of a previously not transmitted packet and, if so, transmitting the previously skipped packet.

- 3. (canceled)
- 4. (canceled)

- 5. (canceled)
- 6. (canceled
- 7. (canceled)
- 8. (canceled)
- 9. (currently amended) A method of transmitting data packets comprising:

 identifying a priority of each packet of a plurality of packets to be

 transmitted;

selectively transmitting higher priority packets before transmitting lower priority packets of the plurality of packets;

receiving the transmitted packets;
smoothing the received data packets; and
playing-out the smoothed packets,

wherein, the step of selectively transmitting is performed by calculating a probability of higher priority packets being delivered prior to play-out times for the higher priority packets. The method of data packet transmission of claim 1, wherein calculating a probability of higher priority packets being delivered prior to play-out times for the higher priority packets is performed by estimating the success probability that a first data packet of the plurality of data packets will be delivered before the play-out time for the first data packet and transmitting a

packet only if this probability is greater than a set threshold.

10. (canceled)

11. (currently amended) A method of transmitting data packets comprising:

identifying a priority of each packet of a plurality of packets to be transmitted;

selectively transmitting higher priority packets before transmitting lower priority packets of the plurality of packets;

receiving the transmitted packets;

smoothing the received data packets; and

playing-out the smoothed packets,

wherein, the step of selectively transmitting is performed by calculating a probability of higher priority packets being delivered prior to play-out times for the higher priority packets and transmitting a packet only if this probability is greater than a set threshold, and further wherein the data is transmitted in minislots and the step of

The method of data packet transmission of claim 10, wherein calculating a probability of higher priority packets being delivered prior to play-out times for the higher priority packets is performed at an end of every mini-slot to determine whether to transmit data in a next mini-slot.

12. (previously presented) The method of data packet transmission of claim 11,

13. (canceled) 14. (canceled) 15. (canceled) 16. (canceled) 17. (canceled) 18. (canceled) 19. A system for data packet transmission, the system comprising: a central transmission unit including a unit controller coupled to a unit buffer and a unit transceiver, the unit buffer also being coupled to the unit transceiver, the unit buffer storing a plurality of data packets for selective transmission by the unit transceiver; a transmission channel that carries the plurality of data packets

wherein the plurality of data packets are video data packets.

data packets from the unit transceiver along the transmission channel to client

wherein, the unit controller controls selective transmission of the plurality of

transmitted by the unit transceiver,

equipment and The system for data packet transmission of claim 13, wherein the unit-controller determines whether sufficient time remains before a scheduled playout time of a previously not transmitted packet and, if so, controls the unit transceiver and unit buffer to transmit the previously skipped packet.

- 20. (canceled)
- 21. (canceled)
- 22. (canceled)
- 23. (canceled)